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ABSTRACT

This is the final evaluation report for the first year of the Academically Gifted Program (AGP) in the Hillsborough County (Florida) Public Schools. The program is supported by state funds and is intended to offer academically challenging content in mathematics and science to gifted students in grades three to twelve. The report presents a project history and description; an explanation of the evaluation methodology; a summary of program evaluation results; and recommendations for program improvement. Major issues investigated during the formative evaluation included teacher selection and training; program locations; funding requirements and allocations; curriculum design and implementation; student identification and selection; scheduling and instructional time allotments; and perceptions of teachers, parents, and administrators. It was concluded that most elementary and secondary AGP students and their parents reacted favorably to the program, the elementary AGP operated relatively smoothly, and the secondary AGP was hampered by hurried implementation. (DWH)

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ANNUAL EVALUATION REPORT
ACADEMICALLY GIFTED PROGRAM
June 1984

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EXECUTIVE SUMMARY

During the 1983-84 school year, the Academically Gifted Program (AGP) was implemented for the first time in the Hillsborough County Public Schools. The program is intended to offer academically challenging content in the areas of mathematics and science to gifted students in grades 3-12. Its central purpose is the provision of a planned sequential program which emphasizes rigorous instructional content to enable students to reach their full potential and to insure optimum student growth in these areas.

A little over $3.8 million in state funds serviced approximately 3,200 students at 84 sites throughout the district. The program involved about 160 teachers.

Formative evaluation results concluded the following:

- Most elementary and secondary AGP students and their parents reacted favorably to the new program. Pronounced strengths were the challenging curriculum content and small class size.
- The elementary AGP operated relatively smoothly during this first year. Major problem areas were: inadequate funding allocations for classroom supplies, supplementary materials and science equipment, inequitable instructional delivery time across all program participants, inadequate facilities at some program locations, and inadequate mathematics materials.

. The secondary AGP was plagued by hurried implementation. Major problem areas were: last minute personnel decisions and scheduling changes, inadequate science laboratory facilities, poor or nonexistent curriculum materials, low instructor morale because of lost planning periods, certification requirements, and inadequate communication about AGP objectives and procedures.

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1.0 INTRODUCTION

During the 1983-84 school year, the Academically Gifted Program (AGP) was implemented for the first time in Hillsborough County Public Schools. The program is intended to offer academically challenging content in the areas of mathematics and science to gifted students in grades 3-12. Its central purpose is the provision of a planned sequential program which emphasizes rigorous instructional content to enable students to reach their full potential and to insure optimum student growth in these areas (from Program for the Academically Gifted, 1983). As defined by the Florida State Board of Education regulations (SBER 6A-6.3019(1)), a gifted child "... is one who has superior intellectual development and is capable of high performance. The mental development... is two (2) standard deviations above the mean." In this district, two standard deviations above the mean translates to a score of 132 on the Stanford Binet Intelligence Test or 130 on the Wechsler Intelligence Scale for Children - Revised (WISC-R).

In 1983-84 approximately 3,200 students (or 4% of the 3-12 public school population in Hillsborough County) participated in the AGP. An FTE weighting of 2.37 for each hour in which these students were enrolled in a course designed exclusively for the gifted generated a little over 3.8 million dollars for the district.

To determine how the program was operating during the first year, the Department of Testing and Evaluation, at the request of the Assistant Superintendent for Instruction, evaluated the degree of implementation of

the AGP. Evaluation of the program, based on the examination of both input and process variables, is intended to produce a database and to act as a feedback mechanism for program decision makers. The following program components were targeted as major issues to be investigated in-depth during the evaluation:

- teacher selection, preparation and training
- program locations, facilities, and equipment
- funding requirements and allocations
- instructional materials' availability and use
- curriculum design and implementation
- governance and program leadership
- student identification and selection
- recordkeeping and paperwork requirements
- scheduling and instructional time allotments
- administrative support
- communication and collaboration
- overall perceptions of teachers, parents, and administrators

The evaluation approach was formative in nature; that is, information gathered was used to communicate with program developers and decision makers so that timely and well-informed decisions could be made about program needs and direction.

This final report for the 1983-84 AGP implementation presents a project history and description, explains the evaluation methodology, summarizes results of the program evaluation, and offers conclusions and recommendations for program improvement.

2.0 PROGRAM DESCRIPTION

Historical Perspective

Up until this academic year, students identified as "gifted" in this district were provided, in addition to their regular classroom curriculum, experiences at an enrichment center for a portion of the school year. One day each week for 18 weeks (one semester), students in grades 3-9 were transported from their school sites to "The Learning Center" at 101 East Seventh Avenue in Tampa. Here they participated in courses such as: photography, group dynamics, computers, creative dramatics, and puppetry. Choices of the frequently-changing, diverse course offerings were left up to the student.

In 1982-83 the center was staffed by 19 certified teachers of the gifted and one supervisor. Approximately 2,800 students each received 54 hours of specialized instruction. The center's primary purpose was to provide opportunities for gifted students to broaden their experiences by working in areas not ordinarily part of the school curriculum. Also, students were able to interact with others of similar abilities and interests, and to make decisions about topics and activities of interest to them. School and learning center programs were not coordinated. Students' learning center activities were isolated from those which occurred at their regular schools.

Planning the Academically Gifted Program

While talking with several superior high school seniors a couple of years ago, Mr. Frank Farmer, Assistant Superintendent for Instruction, learned that they viewed their mathematics and science backgrounds as less than adequate. In addition, they did not feel as if they had been sufficiently challenged in other academic areas. In response to their comments, Mr. Farmer met with selected district-level supervisors and directors, and formed a committee which set about investigating the existing gifted program and formulating a new approach to educating gifted and talented students.

The committee, chaired by Dr. Monte Betz, General Director of the Department of Education for Exceptional Students, was comprised of representatives from the Departments of Elementary Education, Secondary Education, Exceptional Student Education, Student Services, and Testing and Evaluation, school-based teachers, curriculum specialists and administrators from both elementary and secondary levels, and university professors. After deciding on an acceleration (that is, progressing through the curriculum at a more rapid pace than normal) emphasis in the content areas of mathematics and science, the large committee broke into three subcommittees (gifted, mathematics, science) to begin planning specific curriculum content and procedures. In February 1983, the committee published a program guide entitled, Program for the Academically Gifted. In it were stated program principles and goals, as well as overall descriptions of the curriculum design, and specific course objectives for the mathematics and science programs. In addition, student eligibility

requirements, teacher selection procedures, facility needs and requirements, and program evaluation procedures were specified. This document was used as a resource in explaining the program to school-based administrators in spring 1983.

The new academically-focused program is a drastic change from the learning center enrichment program. Ideally, the AGP is designed to be school-based and to educate small classes of gifted students in an exclusive setting (i.e., in separate classes) for that portion of the school day devoted to mathematics and science instruction. In 1983-84 intermediate elementary students (grades 4-6) in some locations received 10 hours of instruction per week in accelerated and extended mathematics and science content. Third grade elementary students received five hours per week of acceleration and extension. Junior high students received two class periods per day of accelerated mathematics and science instruction. Senior high students could elect to enroll in these accelerated courses in one or both subject areas. Figures 1 and 2 show the curriculum structure for both content areas. Academically Gifted Program elementary science curriculum is a combination of an accelerated version of the locally-developed Systems, Balance, Change (SBC) program, laboratory experiences, and an in-depth research project. The AGP elementary mathematics curriculum includes accelerated content of traditional grade-level mathematics objectives, exploration of numbers and number theory using locally-prepared "math topics" packets, and computer instruction. Secondary science curriculum consists of an accelerated pace for specified course objectives and an in-depth original research investigation. Secondary mathematics curriculum includes an accelerated pace for specified course objectives and computer

instruction. Secondary course objectives are listed in Programs for the Academically Gifted (February, 1983).

Figure 1. Mathematics Curriculum Structure

Grades 3-5:	Acceleration will occur so that at the end of grade 5, students will have covered all curriculum objectives up to grade 6. Topics will be designated related to student ability and interest.

Grade:	6	7	8	9	10	11	12
Subject	Pre-Algebra A	Algebra 1A	Geometry A	Algebra 2A	Trignonometry A/ Analytic Geometry A	Math V	AP Calculus (BC Course)
Electives	Computer Mathematics	Computer Mathematics	Computer Mathematics	Computer Mathematics	Computer Mathematics Albebra 3 Analysis	Computer Mathematics Algebra 3 Analysis Advanced Statistics	Computer Mathematics Algebra 3 Analysis Advanced Statistics

Figure 2. Science Curriculum Structure

Grade:	3	4	5	6	7	8***	9***	10***	11	12
Subject A = Advanced	General Science A	General Science A	General Science A	Earth A	Life A	Physical A	Bio A A	Chemistry* A	Physics* A	AP*
Time Allocation (weekly)	4 (hours)	5 (hours)	5 (hours)	5 (hours)	5 (hours)	5 (hours)	5 (hours)	5 (hours)	5 (hours)	10 (hours)
Content-Class Instruction (knowledge)	50%	50%	50%	50%	50%	25%**	25%	25%	25%	25%
Lab - (Application)	30%	30%	30%	25%	25%	25%	50%	50%	50%	50%
Research/Projects	20%	20%	20%	25%	25%	25%	25%	25%	25%	25%
Electives*					Science Research and Anatomy and Physiology, Biology II Chemistry II					

1. Weekly percentage of time may vary but the yearly average should reflect percentages indicated.
2. Students select a project during first quarter of school that will be studied over the year and completed within final two quarters. Selected projects will be presented at regional science fair in March (grades 7-12) or "Science Connections" in May (grades 3-6).

* 3. Students may elect to take an additional AP, Advanced course or Science Research in grades 7-12.

** 4. Beginning in the 9th grade it is expected that most of the content preparation will be done independently.

*** 5. These courses appear earlier than in the course sequence for average students. In the initial year only students will have to "double up" science courses in the 8th, 9th, and 10 grades to enable them to experience all science offerings available to others.

Students who follow this sequence from third through twelfth grade will actually receive one extra year of science and mathematics instruction in homogeneous classes of reduced size. They will be instructed by teachers specially trained in gifted education. In conjunction with the accelerated course content, exploration/extension/application activities are emphasized, particularly in the science curriculum.

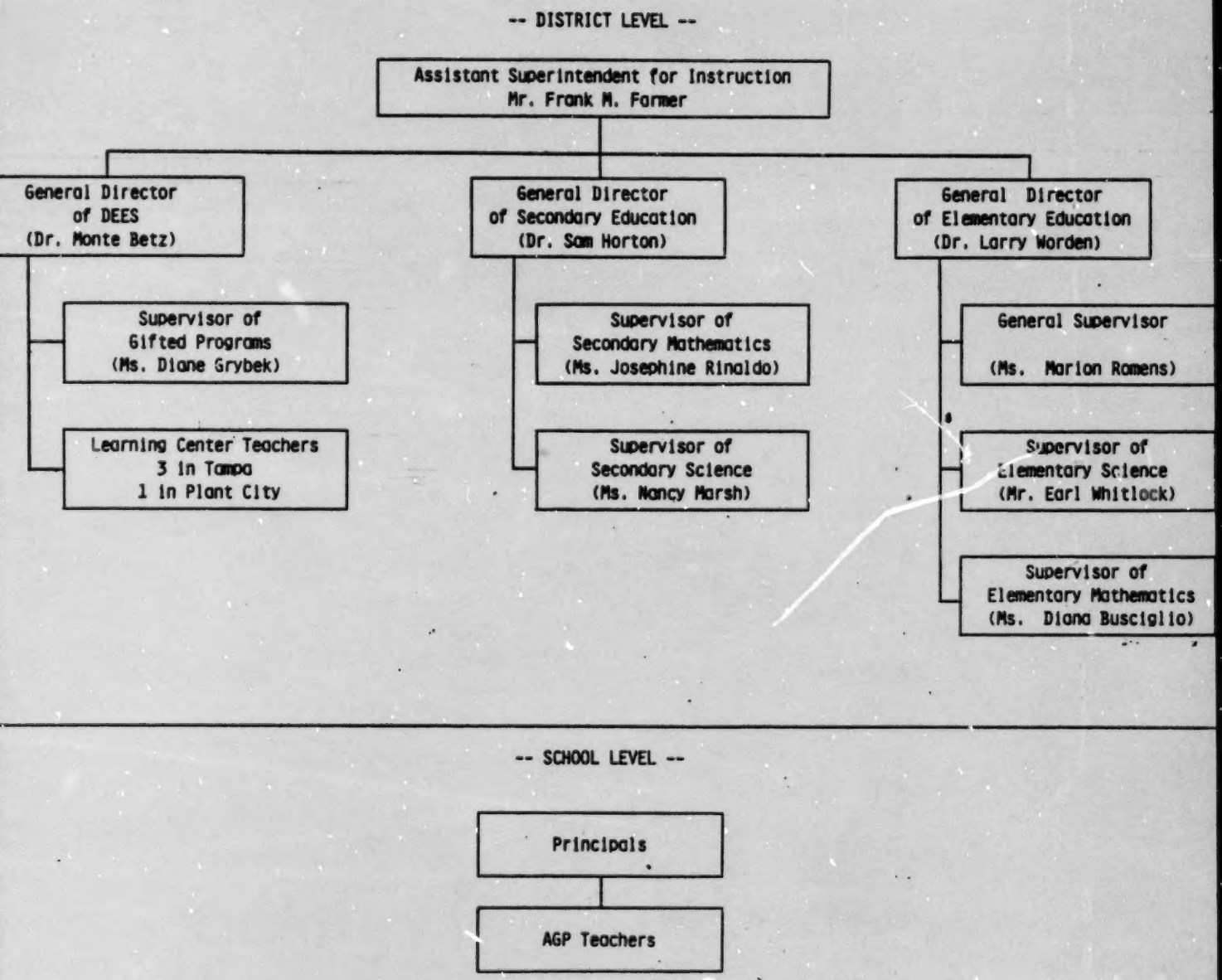
Eventually, Farmer envisions high school students experiencing dual enrollment in public high school and related university/college courses. Plans are underway to facilitate this arrangement, not only in the mathematics and science areas, but in literature, fine arts, and the social and behavioral sciences. The basic program philosophy is to identify gifted students early and accelerate their curriculum content so they will have sufficient background to work independently and cooperatively with local college and university faculty.

Organizational Structure

Responsibilities for development and implementation of the AGP rest at both district and school levels. Figure 3 depicts the general administrative structure of the program and names district-level persons most directly involved in this year's implementation. As shown, three instructional division departments (elementary, secondary, and exceptional student education) were jointly responsible for program occurrences. Teachers and administrators were instructed that issues/questions related to "giftedness," characteristics of gifted students, and DEES regulations were to be directed to Dr. Monte Betz and/or Ms. Diane Grybek; issues/questions related to curriculum design and/or content were to be directed to the appropriate subject area supervisor.

At the school level, principals were responsible for teacher selection, space/facilities arrangements, and general daily program operation.

Figure 3. AGP district and school-based organizational structure


-- DISTRICT LEVEL --
Assistant Superintendent for Instruction
Mr. Frank M. Farmer
General Director of DEES (Dr. Monte Betz)
General Director of Secondary Education (Dr. Sam Horton)
General Director of Elementary Education (Dr. Larry Worden)
Supervisor of Gifted Programs (Ms. Diane Grybek)
Learning Center Teachers 3 in Tampa 1 in Plant City
Supervisor of Secondary Mathematics (Ms. Josephine Rinaldo)
Supervisor of Secondary Science (Ms. Nancy Marsh)
General Supervisor (Ms. Marion Romens)
Supervisor of Elementary Science (Mr. Earl Whitlock)
Supervisor of Elementary Mathematics (Ms. Diana Busciglio)
-- SCHOOL LEVEL --
Principals
AGP Teachers

Teacher Preparation and Training

Most AGP teachers were not certified in gifted education, nor in the past, had they instructed exclusive classes of gifted students. Coming from regular education, most were also unfamiliar with DEES regulations and paperwork requirements. To address these issues and to inform and/or instruct AGP teachers in curriculum content, objectives and expectations, preplanning workshops were arranged for elementary and secondary teacher groups.

Both general and subject area sessions were offered. During the general session teachers were informed of DEES regulations and certification requirements. Subject area sessions consisted of discussions of specific course content with appropriate subject-area supervisors and consultants. Most teachers who knew they would be teaching AGP courses attended. AGP teachers not in attendance were either unaware they would be teaching AGP courses in the fall, or had made other summer arrangements prior to being informed of their teaching assignment.

Specific training sessions in gifted education and subject area methodology occurred during the 1983-84 school year. Involved elementary supervisors scheduled periodic after-school meetings with groups of AGP teachers. At teacher and/or administrator request, they visited schools and conducted individual training sessions on-site. The Department of Staff Development arranged for inservice courses in gifted education so that AGP teachers could progress toward completion of certification requirements at no charge to the teacher. (Teachers had signed a contract stating that in order to continue teaching in the AGP, they would complete at least six hours of training in 1983-84.) In addition, Nova University and the

University of South Florida offered college-credit courses in gifted education. Teachers were charged for enrolling in these courses.

During the summer session 1984, teachers were offered opportunities for subject area instruction through summer institute course offerings and gifted instruction through staff development, USF, and Nova course offerings.

Descriptive Information for 1983-84

The local school is seen as the ideal location to house the AGP. However, during 1983-84, an insufficient number of students classified as gifted according to state criteria prohibited every school from attaining the required FTE-generated dollars to fund a school-based program. The current FTE weight for gifted programming is 2.371; thus a school with less than 12 gifted students was ineligible for an AGP teaching unit. Gifted students at elementary schools with less than the required minimum were transported one day per week to one of two now academically-focused learning centers (one in Tampa, one in Plant City) where they received five hours of mathematics and science instruction. The other four days, they were instructed at their own schools in regular classrooms. Students at 36 elementary schools were served by the learning centers.

Schools differed in the number of AGP instructional units assigned to them. At the elementary level as shown in Table 1, 30 schools had one AGP teacher unit assigned to them; seven schools had a sufficient number of enrolled gifted students to earn two AGP teacher units; one school earned three AGP teacher units. Eleven sixth grade centers, as shown in Table 2, each earned one AGP teacher unit (which supports 22 half-time teachers); three sixth grade centers each earned two AGP teacher units. Almost 80 AGP teachers instructed approximately 1,700 elementary gifted students in science and mathematics.

Table 1

Elementary Schools with 3-5 or 3-6 Grade Levels

Total Number of Sites	Number of School-Based Programs			Number of Schools Whose Students Attended the Learning Center Program
	with One Teacher Unit	with Two Teacher Units	with Three Teacher Units	
74 (51 full-time teachers)	30 (30 full-time teachers)	7 (14 full-time teachers)	1 (3 full-time teachers)	35* (4 full-time teachers)

All sites offered programs in both science and mathematics.

* 36 schools were eligible for the learning center program

Table 2

Sixth Grade Centers

Total Number of Sites	Number of School-Based Programs	
	with One Teacher Unit	with Two Teacher Units
14 (28 AGP teachers)	11 (22 half-time AGP teachers)	3 (6 full-time AGP teachers)

All sites offered programs in both science and mathematics.

About 40 percent of elementary AGP teachers are presently certified in gifted education. Others are either working on certification, or are not planning to teach AGP courses in the future.

At the secondary level, both scheduling and funding difficulties hampered full program operation during the 1983-84 academic year. Because scheduling of classes is a major administrative undertaking in some secondary schools and principals were not notified of the program's county-wide implementation until spring 1983, some secondary schools had problems identifying students, teachers, and classroom space/facilities for the AGP. Furthermore, some high school students had already chosen courses for the 1983-84 school year and were reluctant to change their original schedules. In addition, no new staff were hired to be exclusively "teachers of the AGP," so existing teachers were requested to teach and be paid for an extra class of gifted students (designated as "T-payroll"). This arrangement did away with these teachers' only planning/conference period of the day. As shown in Tables 3 and 4, these three reasons (not enough students enrolled in the AGP courses, scheduling problems, no teacher to teach the course) prohibited some secondary schools from offering courses in one or both content areas to their gifted students.

About 15 percent of secondary teachers are presently certified in gifted education. Others are working toward certification or are not planning to teach AGP courses in the future.

Table 3

Middle School/Junior High Schools

Total Number of Sites	Number of School-Based Programs			Number of schools with neither program
	In Science and Mathematics	In Science Only	In Mathematics Only	
25	19	5	--	1

Table 4

Senior High Schools

Total Number of Sites	Number of School-Based Programs			Number of schools with neither program
	In Science and Mathematics	In Science Only	In Mathematics Only	
11	7	--	--	4

Student Eligibility and Selection

In order to qualify for state funding through the FTE formula, the district must abide by state criteria for student selection and must educate those students in an exclusive setting for the portion of the school day reported in the FTE count. State regulations governing student selection are shown here.

6A-6.3019 Special programs for students who are gifted.

(1) Gifted - one who has superior intellectual development and is capable of high performance. The mental development of a gifted student is two (2) standard deviations or more above the mean.

(2) Criteria for eligibility. A student is eligible for special programs for the gifted if the student demonstrates:

(a) Superior intellectual development -- an intelligence quotient of two (2) standard deviations or more above the mean on an individually administered standardized test of intelligence. The standard error of measurement may be considered in individual cases.

(b) A majority of characteristics of gifted children according to a standard scale or checklist.

(c) Need for a special program.

(3) Procedures for student evaluation. The following are the minimum evaluations required to determine a student's eligibility and educational placement: an evaluation of intellectual potential characteristics of the gifted, statement of nonacademic performance, and the need for a special program.

(4) This rule shall take effect July 1, 1977.*

* For this year students admitted to the gifted program on the basis of pre-1977 scores were eligible AGP candidates.

About 3,600 students in the district were considered eligible for the AGP in 1983-84. Tables 5 and 6 contain descriptive information about this group of students. These data are not entirely reliable because delays in student data transmittal often occur between schools and the district data processing center. However, approximations can be used to describe the general AGP population. Ethnically, whites comprise 93 percent of eligible AGP students; blacks comprise 4 percent; hispanics and orientals each comprise less than 2 percent of eligible AGP students. Eligible males outnumber eligible females by 14 percent.

Because of reasons stated previously, only about 3,200 eligible students were enrolled in the AGP in 1983-84. Most of this 400-student discrepancy occurred at the high school level where gifted students either were not interested in mathematics and science courses, or because they were already enrolled in comparable AP courses, chose not to revise their schedules to enroll in AGP courses in these areas. About 1,500 secondary students (7-12) participated in the AGP.

Table 5

AGP Student Eligibility by Ethnic Categories

Total Number of Eligible Students	Ethnic Category				
	White	Black	Hispanic	Oriental	Other
3,648	3,389	142	51	61	5
(100%)	(93%)	(4%)	(1.4%)	(1.7%)	(.1%)

These data were obtained from district data processing center, November 1983. Numbers and percentages may vary from actual counts due to processing delays and incomplete information.

Table 6

AGP Student Eligibility by Sex Categories

Total Number of Eligible Students	Sex	
	Male	Female
3,648	2,060	1,588
(100%)	(57%)	(43%)

In order to select new students for the AGP, teachers, guidance counselors, administrators, parents and/or students themselves may refer a student for screening. Previous test scores and observed behavior are used as indicators of the need for screening. At the elementary level, the curriculum intervention specialist at the school administers a Slosson Intelligence Test to the student to determine whether an individual psychological evaluation should occur. Students who score 135 or higher on the Slosson are referred for further testing. At the secondary level, a similar procedure is used, except that the Test of Cognitive Skills (TCS) is used as the screening instrument. All referrals follow the well-established Special Services Team (SST) procedures for screening and staffing.

This year, administrators and counselors reported few problems in getting students individually tested for the AGP. In major part, this task was facilitated by special arrangements by the Office of Psychological Services which scheduled psychological testing sessions on several Saturdays and holidays. Teams of psychologists were available at selected locations around the district to test students who had been assigned specific appointment times. Within a reasonable time period, testing results were communicated to the school; AGP eligibility was determined by the SST and,

if recommended, program placement occurred. These selection, screening, testing, and placement activities occurred throughout the school year.

Program Evaluation

Purpose, scope and expenditures for the AGP dictated the need for formative feedback about the program's operation. The first year evaluation was limited to collection of description and opinion data. The following section describes evaluation procedures for 1983-84.

3.0 EVALUATION METHODOLOGY

During the initial program year, evaluation of the AGP purported to answer questions such as:

- What's happening out there?
- Is it working as we expected?
- Is it worth the time, effort, and money?
- What do people think about it?

Evaluation of the AGP was an ongoing part of total program planning and development and was designed to provide an objective view of program occurrences. It was also intended to document major program events and actions, and to make evaluation information readily available.

The first step in conducting the evaluation was to identify key variables on which the first-year evaluation would focus. This was accomplished by communicating with representatives from the Departments of Elementary Education, Secondary Education, and Exceptional Student Education. Based on this information session, an evaluation plan was developed (see Appendix A).

The evaluation approach was based on these principles:

1) The AGP would be described based on the systematic collection of field data rather than reliance on existing written documents.
2) Inconsistencies in information from different respondents about all aspects of the program would be sought and noted.

3) Additional questions revealed during the evaluation process would be noted and addressed if possible.

4) Findings for all evaluation questions would be presented to appropriate decision makers in a timely fashion.

Factors identified as major emphasis for the evaluation included:

Input Variables

- planning
- curriculum design
- facilities and equipment
- funding
- teacher selection, preparation, and training
- materials and supplies

Process Variables

- governance and leadership
- administrative support
- student identification and selection
- curriculum implementation
- materials' use
- scheduling/instructional time
- communication
- recordkeeping/paperwork
- class size
- general attitudes

An issue which emerged during the school year that required attention and intervention was:

- grading/course credit policies

At specified times during the year, information was collected through structured and unstructured personal and telephone interviews, mail-out surveys and questionnaires, record reviews and classroom observations. Sources of information included all AGP teachers, all school-based and

district-level administrators involved in the AGP planning and implementation, a sample of AGP students and their parents, a sample of regular program teachers, several school psychologists, and selected persons in the community. Group-specific interview schedules, mail-out surveys and questionnaires, record review forms, and other data collection instruments were developed by evaluators in the Department of Testing and Evaluation and reviewed by staff members in the Departments of Elementary Education, Secondary Education, Exceptional Student Education, and Staff Development.

Following each collection cycle, data were tallied and summarized according to each respondent groups' responses and impressions of major aspects of the program. Periodically, findings were reported to appropriate program personnel, both verbally and in writing. An interim report (see Appendix B) was disseminated in January 1984 for the purpose of communicating with program decision makers so they could begin planning modifications and taking needed actions.

To complement formal evaluation procedures and to be personally informed about the program General Directors, Horton, Worden and Betz periodically invited school-based teachers and administrators to "town meetings" to discuss concerns about the AGP. Following these sessions, corrective actions were planned.

Product, or effect, data were not sought as part of this year's evaluation design. However, a procedure for gathering achievement data was piloted at two elementary schools, and elementary AGP science teachers were required to administer the science subtest of the Comprehensive Test

of Basic Skills (CTBS) to their students. Findings of both of these activities will be reported at a later date.

In addition to these evaluation activities, a literature review of all current publications related to gifted program curricula and/or philosophy was conducted. As a result of computer-assisted searches, relevant journal articles, ERIC documents, and psychological abstracts were identified, copied, and disseminated to appropriate program developers.

4.0 EVALUATION FINDINGS

Findings reported in this section resulted from analysis of all data collection activities during 1983-84. Summaries of interview, survey, observation and records information constitute findings in each evaluation area. Results are presented by major areas of investigation: input variables, process variables and product variables.

Input Variables

Input variables refer to resources which are generally needed to put a program in operation: planning, program philosophy and design, personnel, facilities/equipment, materials and supplies, and funding. Each variable is discussed individually in this section.

Planning

Planning activities prior to actual program implementation were described in section 2.0. All potentially effected divisions and departments were represented on the large planning committee. A usable document (Programs for the Academically Gifted) was produced as a result of the committee's work. A general program framework was conceived by this planning group.

Initially the program was designed to be piloted for one year in selected locations so that strengths and weaknesses could be identified and "kinks" could be worked out. More detailed planning and long-term administrative and curricular issues were meant to be dealt with during the pilot year. However, in spring 1983, when state funding for the program was assured, the superintendent made the decision to implement the AGP district-wide -- in every school that had sufficient numbers of students to support a program. He determined that all eligible students should have the opportunity to be included in the program. This decision forced both district and school administrators to make hurried decisions about major aspects of the program and to produce quickly planned program documents and training sessions. The last minute nature of many critical program components (identifying and selecting students, hiring and training

teachers, developing curriculum guides, and identifying and ordering materials) caused initial confusion and left a sizeable number of program teachers and school administrators (particularly at the secondary level) questioning their involvement with such a "poorly organized, poorly planned program." In some instances, this initial impression lingered throughout the 1983-84 year. In others, negative feelings were assuaged; things calmed down and smoothed out as the school year progressed.

Most AGP participants agreed that additional planning which involves AGP teachers, subject area supervisors, DEES personnel, and school and district administrators to explore and set specific administrative and curricular procedures is needed before further AGP implementation occurs.

Program Philosophy and Design

In general, the action of refocusing and reorganizing the district's methods of educating gifted students was seen by administrators, AGP teachers, parents, and the community as a positive step and "long overdue." Florida's movement toward standards of excellence in the basic academic areas, as well as the national trend toward more rigorous course content in the mathematics and sciences, provide clear direction for future priorities. It is significant that Hillsborough County is one of the few large school districts in the country to embark on such a program.

The basic program philosophy, one which combines acceleration of mathematics and science course content and extension/expansion/exploration of concepts, was viewed by AGP participants as appropriate for most gifted students. However, some educators, students, and parents argued that gifted students are not always talented (or even capable) in these academic

areas, nor is acceleration the key to gifted education; thus they viewed the program philosophy and design as narrow and restrictive. At least, they argued, additional subject areas should be added.

Some AGP teachers (about 20 percent) at both elementary and secondary levels expressed concern that, rather than providing appropriate individual educational programs for these students, the program design "forces" every student into the same curriculum focus and pace, ignoring individual differences, needs, and interests. Some parents (about 15 percent) stated similar reservations about the mathematics/science program emphasis and about the "busywork" their children are assigned in mathematics. Related comments by several AGP teachers pointed out that the present curriculum places too much emphasis on quantity of work, instead of quality. Instances of pages and pages of monotonous homework assignments were cited as inappropriate examples of activities for gifted students by both parents and teachers.

A clearer differentiation between the AGP curriculum and the regular program curriculum seems in order. On the whole, however, the AGP, as designed, is seen as both challenging and stimulating to students. All 103 eligible elementary and secondary students who were interviewed stated they felt capable of doing the instructional work in this program; 93 percent said they would, if given a choice, continue in the AGP.

Personnel

It is an understatement to report that insufficient numbers of properly certified teachers were available to teach the AGP in 1983-84. At the

beginning of the school year, 20 percent of AGP teachers reportedly were certified in gifted education.

Teachers became involved in the program in various ways. Most elementary principals advertised for and selected an outstanding teacher(s) from their existing staffs for the AGP assignment. Most secondary principals, faced with scheduling changes and uncertainties as to the number of eligible and willing students to enroll in hastily-created courses, sent out a request to their staffs for teachers who were qualified to teach upper level courses, who were willing to take on an extra course, and who would work toward certification in gifted education. While the extra course assignment resulted in more money for the teacher, it also removed his/her one planning period of the day.

Status of the elementary AGP teacher and the secondary AGP teacher were quite different. In most instances, the elementary teacher was assigned full-time (or half-time for 22 sixth-grade center teachers) to the AGP, instructed small groups of AGP students all day (or half the day), and was solely involved with AGP instruction. Most taught between 4½ and 5 hours per day. Almost all secondary AGP teachers, on the other hand, were assigned their usual number of regular program courses (5) plus one AGP course with no planning period. In addition, both groups of teachers were required, if they are to continue teaching in the AGP, to earn at least six semester hours toward certification in gifted education.

School and district administrators commented consistently on the high quality and professionalism of almost every teacher in the AGP. Eighty-four percent had six or more years of teaching experience. Many teachers, themselves, reported their enthusiasm for and pride in the

program. However, both groups of AGP teachers were overworked. Secondary teachers, in particular, needed relief from six teaching periods a day and additional after-school certification courses. Several of these teachers stated that they felt taken advantage of. Because of their conscientious natures and "do the best job possible" attitudes, they were asked to do excessive amounts of work with very little rewards.

Certification requirements were a source of frustration to many teachers in the program. Many secondary teachers who had taught advanced classes saw no reason to attend gifted courses in order to instruct the same students they had in previous years. Sixth grade teachers of the AGP must acquire certification in both gifted education and their particular subject area, a lengthy and potentially costly investment. Because of the tight timelines involved in implementation of the AGP, the Staff Development Department was unable to plan summer and fall 1983 inservice gifted certification courses for AGP teachers. Since this department was not represented on the planning committee, the need for immediate staff development intervention was unknown to its director, John Lizer. When inservice needs were known, arrangements were made and free-of-charge courses leading to gifted certification were offered to AGP teachers beginning in January 1984. Six courses (three in "Nature and Needs of the Gifted" and three in "Guidance and Counseling for the Gifted") were provided at various times and locations from January through June 1984. Total enrollment for all six courses was 175; total cost to the district was $22,400. About 45 percent of AGP teachers who needed certification used this method to acquire the necessary six hours. Another 30 percent enrolled in courses at

the University of South Florida; one person attended the Tampa campus of Nova University.

Preliminary district-level training and teacher assistance were provided. Teachers were divided, however, on the quality of the training and to what extent it was effective in assisting them to implement the AGP. Opinions varied on summer (preplanning) workshop effectiveness. Reportedly elementary teachers were more than satisfied with the science sessions, and generally satisfied with the mathematics sessions. Most secondary teachers felt they learned some things, but commented that their subject-area sessions, while interesting, did not effectively teach them what to do with their AGP students content-wise. The general overview session for this group was reportedly confusing in that no one was able to respond adequately to their questions about certification requirements, paperwork responsibilities, and other administrative procedures. Many of these concerns have since been remedied; however, the initial program impression for most secondary teachers was disturbing, at best.

On a regular basis throughout the year, elementary subject-area and general supervisors held after-school meetings which AGP teachers were invited to attend; they also responded on-site to individual teachers and/or administrators requests for assistance. Secondary subject-area supervisors did not call periodic meetings, but did respond to teacher requests, by phone or in person. Secondary teachers praised these supervisors for their efforts, and requested additional group-type meetings in 1984-85 so they could communicate with district-level personnel and with teachers teaching similar courses at other schools.

Based on interviews with AGP teachers and their careful responses to survey questions, it was obvious that most teachers in this program are responsive and responsible professionals dedicated to doing a first-rate job of teaching the curriculum and teaching children. It was also obvious that a substantial number of secondary-level teachers were disenchanted with the program. Some will not teach AGP classes next year; some said they'll "give it one more year to see if improvements are made." For this type of program, the personnel resource is a critical factor in its success or failure. Additional thought and substantive action are necessary in this area before the AGP can progress to a quality educational program.

Facilities and Equipment

Facilities and equipment vary depending on individual school location. Some AGP teachers work in comfortable, well-lighted, well-ventilated, well-equipped classrooms. Others suffer in 8'x25' cramped trailers, poorly ventilated makeshift work areas, or noisy library conference rooms.

Both elementary and secondary staffs conducted thorough studies of space and laboratory facilities during 1983-84. Appendix C states the present and desired types of facilities for elementary gifted programs. Results of the secondary study are available from Ms. Nancy Marsh, secondary science supervisor.

A survey conducted by elementary principals Dr. Pearl Hojnacki and Ms. Nancy Goldsmith and supervisor Dr. George Mitchell revealed that: about 25 percent of program locations were inadequate in terms of space; 20 percent had no electrical outlets (essential for computers and some science equipment); 8 percent had inadequate lighting and heat; 3 percent had

inadequate ventilation; 16 percent had poor acoustics; 31 percent had no sink with running water (necessary for science experiments); 12 percent had no chalkboards. They recommended the following AGP classroom facility.

> "A single space (room) 939 sq. ft. or a combination of classroom space, 744 sq. ft., plus 95 sq. ft. storage and 100 sq. ft. teacher planning. Facility should have running water, sink, electrical outlets, adequate lighting, heat and A/C, cabinet and counter space, chalk and bulletin boards."

Secondary facilities for all science programs were reviewed as part of the RAISE bill compliance procedures. Recommendations to upgrade existing laboratories throughout the district were submitted; $1.1 million worth of modifications for labs in grades 9-12 are scheduled to be made over the next several years. (These are general improvement funds, not specifically for the AGP.) During 1983-84, however, several junior high laboratories were not sufficiently equipped to deal with the AGP's laboratory requirements. For example, one large 8-9 center had difficulty offering the IPS program to 8th grade AGP students because of lack of proper facilities, equipment, and trained teachers. Scheduling of labs was a problem at both junior high and senior high schools. The amount of lab time delineated in the secondary science curriculum design placed a burden on already-overloaded lab schedules. Some teachers were forced to "talk-through" lab experiments rather than do the real thing.

Classroom space at the secondary level seemed, for the most part, adequate. A sufficient number of tables, chairs, and desks for extra classes, however, was initially a problem. With more advance time and better scheduling for 1984-85, this situation should be alleviated.

The availability and adequacy of computers, reference materials, and science equipment were also investigated. Computers for the AGP were ordered late, thus were late in arriving at both elementary and secondary schools. Most elementary schools received their computers by January 1984. After initial worries with electrical outlets and suitable space for housing/storage, teachers were able to incorporate them into the mathematics portion of the curriculum. Junior and senior high computer availability and use varied with location. Some senior high computer labs only were available to AGP teachers and students if others had not signed up for their use. Well-planned, sequential computer instruction was impossible in these locations. At other schools, teachers had computers but didn't use them in any systematic manner because it was unclear to them how computers fit into the AGP mathematics curriculum. Other program teachers and students made extensive use of computers, and spent considerable time on computer instruction and programming. It was obvious that this portion of the curriculum needs clarification to assure consistency of implementation.

Many media centers in both elementary and secondary schools were not adequately stocked to deal with teacher and student requests for information. Reference books, research services (computer searches, etc.) and current scientific volumes are lacking. Students were forced to utilize county/city public libraries as well as those at USF and University of Tampa.

Expensive science equipment (such as high-powered microscopes) was absent from most elementary schools. Although some schools' PTAs or parent groups purchased equipment for the science program this year, other schools did not receive these benefits. Elementary budget

recommendations for 1984-85, shown in Appendix C, include $500 for equipment expenditures. This allotment is reportedly inadequate to sustain a quality laboratory program. Additional resources are needed.

The spacious learning center facility in Tampa was adequately equipped with both computers and science equipment, and appeared as if periodic upgrading and repairs would be sufficient to maintain a quality AGP curriculum delivery.

In summary, adequacy of program facilities and equipment depended on school location. Studies of both issues were conducted by elementary and secondary staff or committee. Plans are underway for remedying some of these weaknesses in elementary schools. Secondary schools which include grades 9-12 are set for upgrading of laboratory facilities. Seventh grade centers and other schools without a ninth grade (Eisenhower) however, are not scheduled for these improvements.

Materials and Supplies

Availability and quality of general program materials and supplies differed according to subject area and level. The elementary science program Systems, Balance, Change (SBC), an intact locally-developed curriculum, was readily available including teacher manuals, student tests, and duplicating masters. Materials' kits for each level of the SBC program were ordered from the Delta Company and provided to each AGP science teacher. Four professional books on specific science topics were also provided. Materials arrived a little late; some kits contained items that were defective or of poor quality. Several teachers reported specific examples of poor workmanship, such as: curved meter sticks, inaccurate balances and

plastic rulers, and plastic carts without wheels. In addition, materials were missing from some kits, thus not available for some of the science lessons.

The elementary mathematics program utilized existing textbooks supplemented by locally-developed "math topics" packets. Almost all teachers were less than satisfied with the math topics materials. In addition to their late arrival, teachers complained they were poorly organized and in need of extensive revision. The appropriate level of Heath textbooks was used by all teachers; some followed it very closely in terms of sequence and pace; others used a pretest-posttest approach for each chapter's objectives; other teachers structured their own lessons to introduce and reinforce appropriate grade level objectives.

Almost all sixth grade AGP mathematics teachers commented unfavorably about the Holt pre-algebra textbook which is apparently poorly organized and lacking in adequate content. Mathematics enrichment materials/activities and computer software were in short supply.

Sixty percent of junior high AGP teachers stated they received no program materials other than the textbooks associated with their course. Materials to facilitate the exploration/extension/expansion portion of the AGP curriculum design were not provided. Almost all high school teachers reported similar situations and needs. When asked about the adequacy of program materials, over half of the high school teachers said, "what materials?". Most often heard requests were for laboratory supplies, computer software, and mathematics exploration materials. Additional laboratory time necessitated additional supplies. Teachers and students either did without, or made requests to their science department heads for extra items. Department heads, responsible for all science courses and curricula, were not

always able or eager to make special allocations for AGP students and teachers.

In sum, both the variety and supply of materials were reportedly insufficient to provide a quality instructional experience for AGP students. Although acceleration materials in the forms of textbooks and kits were available, supplies and activities for extension/exploration/expansion were non-existent or of poor quality. Many teachers spent their own money to stock their classrooms or courses.

Funding

Based on FTE counts in October and February, the AGP generated $3.8 million in funds for the district. These additional funds are necessary to maintain a reduced teacher-pupil ratio, and to purchase initial materials and supplies.

Elementary level monies were used to purchase computers and science kits. (Computer allocation was based on a district-wide formula, dependent on the number of students in the AGP at each school.) AGP teachers, however, had no classroom budgets unless the individual principals made special allocations for them. Most teachers made supply requests on an as-needed basis, but had no extra monies to purchase supplementary or professional materials. After investigating this issue, the elementary budget and facilities committee (see Appendix C) recommended the following allocations for 1984-85:

A) Teaching Supplies: $200 per full-time teacher unit
B) Consumables: $2.60 per student
C) Equipment: $500 per school with gifted program
D) Materials: $400 per school with gifted program

E) Professional Books: $45 per school

During 1983-84 no extra funds were allocated for the AGP at the secondary level. Gifted science courses were given the same allocation as advanced science courses; gifted mathematics courses were given the same allocation as other mathematics courses. These amounts were not sufficient to equip and supply a new program. After studying the funding issue and examining needs at the secondary level, secondary administrators have allocated an additional $300,000 to $400,000 to the AGP for 1984-85. Specific expenditures have not been delineated at this time.

Process Variables

Process variables refer to those activities, events, and/or processes that occur during the actual implementation of a program. For this evaluation, process variables included: governance and leadership, administrative support, student identification and selection, curriculum implementation, materials usage, instructional and planning time, communication, recordkeeping/paperwork, class size, grading/course credit/student performance, and general attitudes of parents/teachers/administrators. Each variable will be discussed individually in this section.

Governance and Leadership

In 1983-84 leadership and direction for the AGP were the joint responsibility of General Directors Worden, Horton, and Betz. Subject area, general, and/or program supervisors within each department developed the curriculum, trained and assisted teachers and administrators in implementing the AGP, and performed other program duties as necessary. Teachers and administrators were instructed that general education supervisors were responsible for questions/issues about matters relating to mathematics or science curriculum; matters relating to gifted education and special education procedures/regulations were the responsibility of DEES personnel (see Appendix D).

In theory, this organizational arrangement seems logical; in practice, it created some problems. If problems or questions arose, AGP teachers routinely communicated with the appropriately designated supervisor, most of whom (particularly Earl Whitlock, Marion Romens, Nancy Marsh, and

Josephine Rinaldo) were given high praise. However, teachers and administrators alike complained that several phone calls to multiple supervisors were often necessary to answer one or two relatively simple questions. It was generally agreed that this structure was confusing and time-consuming.

The role of the supervisor of gifted programs (Ms. Diane Grybek) was uncertain this year. In the past, her duties (responsible for all programs for gifted students and the operation of the learning center) had been clearly defined. However, the change in program philosophy -- toward a school-based academic acceleration model embedded in the general education curriculum -- made her position unclear, partly because the program itself was neither "fish nor fowl." The AGP is funded through a weighted FTE formula, and as such must comply with DEES state regulations governing certification, documentation, student eligibility, and instructional time (part-time gifted programs are funded for no more than 12 hours per week). On the surface, then, it seems to be a DEES program. However, the program is tightly tied to a structured academic curriculum (instead of individualized for each student); its secondary teachers are classified as regular program instead of DEES teachers, and subject-area supervisors have responsibility for designing and monitoring the curriculum. Moreover, the AGP is essentially school-based (except for the learning center elementary students) and is administratively monitored by the school principal.

A number of respondents suggested that the AGP, particularly if it may include academically talented students in the future, be removed from DEES and placed in regular education. In addition, it was generally agreed by program participants that they would feel more comfortable if one district-level person were responsible for, and could respond to, questions

and concerns about all aspects of the AGP. They viewed responsible, knowledgeable, and central leadership of the program as critical to its continuation and quality.

Administrative Support

District and school-based administrators were, for the most part, supportive of the AGP. Central administrative staff in the Departments of Elementary Education, Secondary Education, Student Services, Exceptional Student Education, and Staff Development, as well as Data Processing (in the Business and Research Division) and Area Directors responded in timely fashion to most program needs. School principals, assistant principals, guidance counselors and curriculum specialists, despite last-minute and sometimes conflicting guidelines and information, usually were responsive and cooperative in implementing the AGP.

Two groups of administrators expressed the most reservation about the AGP: principals of learning center schools and principals of secondary schools with small numbers of eligible AGP students.

Principals of elementary schools in which students attended the learning center program desired an equitable program for their gifted students, and did not feel the one-day-per-week learning center program was sufficient. A committee chaired by Dr. Wilma Stone, principal, investigated this issue and made recommendations to correct this perceived inequity (see Appendix E). Secondary principals in schools in which a small number of gifted students were enrolled experienced scheduling problems (classes with only 3 or 4 students) and pressures to identify more eligible students at their site. A few secondary principals, disturbed by the hasty

implementation timeline, delayed their involvement by postponing their teacher selection or student identification process. Principals at some locations could not identify mathematics or science teachers willing to teach in the program and/or comply with the program's certification requirements. On the whole, however, both elementary and secondary administrators were AGP advocates and backed its implementation in their schools.

Within the constraints of other ongoing program needs and district-level commitments central office staff supported the program and responded to its needs. Secondary supervisors, busy with RAISE bill requirements and other mandated programs, were unable to devote substantial amounts of time to the AGP. Due to a medical problem, the secondary science supervisor was out for a major portion of the 1983-84 school year, thus was not available to coordinate secondary science program happenings.

Student Identification and Selection

This issue was a major one during the 1983-84 implementation year. Present state guidelines for gifted programs specifically state that students must score two standard deviations above the mean on an individually administered test of intelligence in order to qualify for special programming and funding. Thus, the IQ score is the critical element in judging program eligibility. Almost every person involved with the AGP commented that measures of IQ alone are insufficient means to identify students for this program. The AGP's acceleration emphasis in two rigorous content areas is not suitable for all gifted students. Teachers stated that about 20 percent of the 1983-84 AGP population were not appropriate candidates for this type of program. Four reasons were given: 1) lack of motivation or interest in

mathematics and/or science; 2) lack of prerequisite skills in one or both areas; 3) lack of aptitude in these areas; 4) disabilities (e.g., a specific learning disability) that prevent overall or specific academic progress. After several weeks or a marking period in the AGP, some students and/or their parents requested rescheduling into regular classes. Other students remained in the AGP, but suffered poor, even failing, grades.

Some teachers who expected an entire class of motivated high-achievers were bewildered at some students' lack of achievement and/or commitment. During the year, teachers determined that not all gifted students are high-achievers, nor are they all motivated in similar directions. Individual needs, pressures and intrinsic rewards are proportionally as present in gifted populations as in other segments of society.

Teachers also reported that some students simply did not meet the IQ criteria for the AGP. Prior to 1977, when the present state law took effect, the Slosson Intelligence Test was used to identify students for the previous learning center program. No longer acceptable as a reliable and valid IQ measure, students who were initially placed based on results of this instrument were still considered eligible for the AGP. Junior and senior high school programs were most affected by this "grandfathering rule."

In their zest to qualify for and/or maintain a school-based AGP, some school personnel identified questionable candidates for the program, or tested students two and three times until their test scores met criteria. (Although this happened in an extremely small number of instances, it did occur several times -- usually at the insistence of a parent or teacher.)

Many program personnel recommended that three criteria: ability, interest, and aptitude, be used to identify appropriate AGP students. Moreover, they commented that academically talented students (who did not score a 130 or better on an IQ test) are better or equal candidates for the AGP in that they are usually conscientious high achievers who are motivated in these particular subject areas.

The Department of Student Services, charged with identifying and evaluating potential AGP students, was commended for its cooperation in responding to AGP needs during this initial year. Psychologists scheduled special testing sessions on weekends and holidays to accommodate the number of referred students. They also spent extra consultation time with parents. Testing for the AGP was treated as a priority for this year by SST members.

Three investigations of student selection, screening, and AGP membership were conducted by staff members in the Office of Psychological Services. Dr. Caroline Barnard, Supervisor, examined the disproportionate representation of minority students in the AGP. Of the 3,600 eligible AGP students, less than 150 of them are black. Results of this study were reported to Mr. Farmer in May 1983. Information is available through Dr. Barnard's office (see Appendix F). A second study sought to develop an effective screening procedure for junior high school students. Patrick Canavan, Dr. Robert Haines, school psychologists, and Ms. Linda Richey, intern, evaluated the screening capability of the Test of Cognitive Skills (TCS) as a predictor for AGP eligibility. The study is not yet complete, but preliminary results suggest that the TCS can be useful in initial identification of students. Junior high guidance counselors were furnished with

this information and are presently using the suggested screening procedures (see Appendix G). The third investigation involved identification and testing of students at the high school level. Dennis Todd, chairperson of the School Psychologist's Senior High School Committee, in anticipation of a large number of senior high referrals, set about developing criteria and procedures for this group. In actuality, not many senior high referrals were made (except at Plant High School); staff psychologists were able to accommodate all requests.

The issue of student selection and program eligibility has many facets, each of which needs careful scrutiny in coming years. Ongoing study in this aspect of the AGP is critical to student membership and program direction.

Curriculum Implementation

As expected, the acceleration aspect of the curriculum design was not fully in place during this first year. This was a "catch-up/double-up" year for both areas of the curriculum. Students and teachers had to cover the traditional grade curriculum and the following year's as well. Both elementary and secondary students entered the program lacking the necessary prerequisite skills in mathematics, science, and independent study habits to sufficiently progress through the program at a rapid pace. Teachers reported they were unable to bypass or speed through content materials and move to higher level thinking skills and independent research activities. Although most teachers stated that program expectations were

"about right," they admittedly modified the curriculum pace and focus to allow for students' lack of knowledge and skills. Most instructional time, particularly in mathematics, was spent on acceleration rather than exploration/expansion activities and concepts.

The modification of pace was particularly critical at the sixth and seventh grade levels in the pre-algebra and algebra courses. Sixth grade AGP students had to master the traditional sixth-grade curriculum and get a solid start in pre-algebra. Seventh grade AGP students had no pre-algebra background, thus had a difficult year with the algebra requirements. Some teachers and district supervisors questioned students' developmental readiness for the level of abstract thinking required in these courses and in the eighth grade geometry class. It was difficult to determine whether student difficulties were the result of developmental phenomena or lack of prerequisite mathematics and study skills. The next couple of years should provide opportunities to study this situation and to decide on appropriate directions for sixth, seventh, and eighth grade mathematics AGP courses.

Because so much content had to be covered during this program year, little time was spent on the exploration/extension/expansion aspect of the mathematics curriculum design. Homework assignments were frequent and lengthy, causing both parents and students to complain to school officials.

Many AGP teachers and a substantial percentage of parents were concerned that the AGP will be solely an accelerated curriculum based on quantity of content instead of quality of thinking skills. They saw this situation occurring this year and expressed hope that appropriate program planning and materials will result in a differentiated gifted curriculum which

combines both acceleration and higher level thinking skills. This year secondary AGP courses appeared no different than last year's courses at the next higher grade level. AGP course objectives and textbooks were indistinguishable from regular program objectives and texts. Teachers reportedly were able to move along at a faster pace and enjoyed the small class size. However, these seemed to be the only factors which separated the two types of courses.

The elementary science curriculum seemed to most closely match the original design specifications. For the most part, this was due to its immediate availability, the effectiveness of teacher training, and the ongoing support and communication of the program supervisor.

The elementary mathematics program was hampered by late arriving and poorly organized mathematics topics materials, an absent program supervisor (a situation that should be alleviated with the new mathematics supervisor, Diana Busciglio), and unfamiliarity with the magnitude of the year's work. More than one parent voiced concern that their child was instructed, during the last month of school, to "do the first half of this book (e.g., 5th grade math book) for homework." It is unknown how widespread this occurrence was, but obviously specific thought should be devoted to dealing with this situation and providing direction for teachers.

Overall, curriculum implementation is expected to be much different in 1984-85. Students should have more content knowledge; teachers should be more comfortable with the curriculum; less time should be spent on acceleration with more time allotted to higher level thinking skills.

Materials Usage

As discussed previously, quality and availability of program materials for this initial year varied considerably. Most elementary science teachers commented that, aside from some faulty science materials and equipment, they made adequate use of SBC teacher manuals, student duplicating masters, student tests, and professional books. Most elementary mathematics teachers used existing textbooks, personal supplementary materials, selected portions of the "math topics" packets, and computer hardware and software. Except for textbooks, all materials were late in arriving and sometimes arrived too late to be incorporated into the instructional sequence. Almost all mathematics teachers agreed that additional exploratory mathematics materials and computer software are needed for the 1984-85 school year. Pacing information was also requested.

Sixth grade science teachers, a major portion of whom used the earth science curriculum materials, reported that texts and unit materials were generally satisfactory. Mathematics teachers at the sixth grade level complained about the inadequacy of the Holt pre-algebra textbook and requested additional manipulatives and exploratory materials. Most said they specifically needed visual aids and manipulatives to assist students in understanding more advanced/abstract mathematics concepts. Several teachers, due to the lack of an adequate classroom supply budget, reportedly spent their own money for supplementary materials and necessities such as pencils and paper.

Junior and senior high school teachers' opinions of AGP materials ranged from poor to adequate. Most agreed that materials provided to them were, at worst, nonexistent, and, at best, limited. Indeed, most secondary AGP teachers reportedly used on-hand materials, textbooks, and supplies.

More diverse materials were requested, as well as money to purchase classroom supplies and supplementary books.

Curriculum guides were not provided at the secondary level. Thus, most AGP teachers were uncertain as to the exact nature of curriculum focus, activities to be covered, or what instructional pace to set. Guidelines for science research projects were provided, but money to assist students and teachers in producing a satisfactory project was not available. During parent interviews, one parent of a senior high student commented that she had purchased, at considerable cost, five animals and plants for two projects, neither of which was carefully planned, monitored, or completed. (Her child has since dropped out of the AGP.) Additional guidance and/or assistance is required in this area.

Because of the need for the emphasis on acceleration of content this year, many supplementary and/or exploratory materials either were not used or not necessary. Teachers anticipated increasing need for these types of materials when students have sufficient content backgrounds to warrant their extensive use.

Instructional and Planning Time

From a number of vantage points, time has been a major program issue. Instructional time for students and planning time for teachers are both areas of concern.

The elementary curriculum design specifies 10 hours per week of mathematics, science and computer instruction for AGP students in grades 4-6 and five hours per week for grade 3 AGP students. Although several schools provided additional hours to grade 3 students, most school-based

programs operated within these time frames. Students who attended the learning center program, however, were offered only five hours per week of AGP mathematics, computer, and science instruction. They, of course, were enrolled in regular program mathematics and, in some cases, science classes at their school facility, so one could argue that a comparable number of instructional hours in these content areas were delivered. It is doubtful, however, that regular program instruction was similar to AGP curriculum design at 35 different school sites. Inequities existed, then, in instructional time involvement between the school-based and learning center programs. A committee of administrators and supervisors investigated this issue and determined a number of alternatives to rectify the situation (see Appendix E). Program developers are hopeful that within the next year, funding arrangements can be made so that schools with small gifted populations can combine gifted and talented (high achievers but below the 130/132 IQ cutoff score) students to form classes for school-based instruction. In so doing, the gifted class exclusivity would be lost and, along with it, the increased FTE weight for those students. Studies are presently underway to determine the extent of the funding loss (and ways to alleviate it) if this situation were to occur. In any case, students in grades 3-5 who attend the learning center will receive 360 fewer hours of AGP instruction in a three-year time period than those in school-based programs -- an inequitable arrangement.

Secondary level AGP students were enrolled in courses which met for the standard 50-55 minutes. Although most teachers agreed that this was a satisfactory time period, some science instructors stated that occasional

flexible scheduling for laboratory experiences was desirable. In almost the same breath, they commented that "flex scheduling" would be an administrative nightmare in most locations.

Planning time is definitely a need. Elementary teachers usually taught five hours per day, scheduled according to school activities and needs. One elementary AGP teacher in a school had five preparations in two subject areas for students at three grade levels. Two AGP teachers had three preparations in one subject area for students at three grade levels. Secondary teachers usually taught six hours per day with one or two AGP course preparations, as well as four other preparations.

Almost every AGP teacher mentioned the need for additional planning time. Secondary teachers in particular, were breaking under the pressure of six-hour days with no planning or conferencing period. Other DEES program (EH, SLD) teachers generally teach three periods per day and have three periods for conferencing/testing/paperwork. The depth of content preparation and determination of differentiated instructional delivery strategies for AGP students require substantial teacher planning. Individually directed study for students necessitates personal interaction between teacher and student. Increased percentage of science laboratory experiences, as stated in the curriculum design requires teacher preparation time. Parent conferences, by telephone and in person, take time and preparation.

In order to do an adequate job of AGP instruction, teachers at all levels need additional planning time considerations. Throughout the 1983-84 year, this single issue caused significant discontent among and discomfort for Academically Gifted Program teachers.

Communication

General information about the AGP was communicated to teachers and administrators at large-group meetings, through written memoranda and telephone messages. Uncertainties about program guidelines, procedures, and requirements resulted from its "infant" status and its lack of a central program leader. Some program decisions, by necessity, were made as problems/issues were encountered. Conflicting messages were sometimes transmitted because of the number of different persons (with their respective roles and responsibilities) involved with the AGP. Oftentimes, specific questions were left unanswered because of lack of consensus or time to deal with an issue.

Some AGP teachers stated they sometimes had no knowledge of policies and/or activities that were communicated to building level administrators or guidance personnel. Elementary program supervisors arranged monthly after-school meetings in order to provide a regular communication system with school-based teachers. These voluntary attendance gatherings offered opportunities for support and information exchange. A majority of teachers attended one or more of these meetings and rated them highly. Periodically, elementary principals were informed of program status at district-level meetings.

Aside from the initial pre-planning meeting, secondary teachers had no opportunity to meet on a group basis. Many of them felt "in the dark" about program occurrences for a substantial portion of the school year. Individual communications with program supervisors usually were initiated by the school-based teacher or administrator if problems/questions arose;

these resulted in some resolution, but secondary teachers consistently remarked that more frequent communication was both necessary and important.

As mentioned previously, Betz, Horton, and Worden convened at least two feedback sessions with AGP teachers and/or administrators during which information about program operation and needs was solicited. Moreover, Dr. Shelton, Mr. Farmer, general directors, and supervisors visited AGP classes and talked with teachers, students, and school administrators.

Information was disseminated to parents of AGP students at group IEP meetings held in September or October at the school sites. Parents were invited to attend one of several evening sessions where program goals and general policies and procedures were stated.

Results of a telephone survey, conducted with 78 randomly-selected parents of eligible AGP students, are presented in Table 7. Percentages of yes-no responses to five survey questions relating to the adequacy of communication about the program are shown according to school level and for the total respondent group. A substantial percentage of these parents seemed to have been provided with sufficient information about the reason for their child's selection for the AGP, as well as sufficient opportunity to discuss their child's progress. Fewer of these parents were sufficiently aware of AGP objectives; fewer still were sufficiently knowledgeable about actual AGP activities and experiences. Less than half of this respondent group had visited the AGP classroom. Senior high parents seemed to be least knowledgeable about the program.

Table 7

Results from Telephone Interview of Parents of Eligible AGP Students

Question #1: Have you been provided with sufficient information about why your child was selected for the Academically Gifted Program?

	Elementary N = 38	Junior High N = 24	Senior High N = 18	Total N = 78
Yes	95%	88%	63%	86%
No	5%	12%	37%	14%

Question #2: Have you been provided with sufficient information about the objectives of the Academically Gifted Program?

Yes	76%	67%	50%	72%
No	24%	21%	50%	28%

Question #3: Have you been provided with sufficient information about the activities and experiences that your child pursues in the Academically Gifted class(es)?

Yes	61%	54%	56%	62%
No	39%	33%	44%	38%

Question #4: Have you had the opportunity to visit the Academically Gifted classroom?

Yes	68%	29%	6%	44%
No	32%	71%	94%	56%

Question #5: Have you been offered sufficient opportunity to discuss your child's progress with the teacher or other individual(s) at the school?

Yes	95%	75%	44%	78%
No	5%	25%	56%	22%

Class Size

The reduced teacher-pupil ratio available in AGP classes was viewed by teachers, parents, and students as a definite "plus." Smaller class size reportedly offered many interaction opportunities for teacher-student and student-student exchanges. Frequent verbalization and advanced language use are two characteristics of gifted students that were accommodated and encouraged by the smaller classes. Teachers stated they were able to move the class along quickly and to give individual attention to students.

Class size sometimes differed by school level or from school to school. Almost all elementary AGP classes consisted of fewer than 20 students; indeed, most classes (about 90 percent) contained fewer than 15 students. Secondary AGP classes were slightly larger; about 75 percent contained fewer than 20 students. The rest (25 percent) of the classes were larger; 10 percent included more than 25 students.

These overcrowded classes drew complaints from teachers, parents, and students. Teachers in these situations felt the increased class size was unnecessary, and was of little benefit to students. In at least two situations parents stated they had withdrawn their children from the AGP because of a large class size. (One parent cited 32 students in a high school mathematics class.)

In general, a reduced class size was seen as a positive aspect of the program and was clearly evident in most AGP classes.

Recordkeeping/Paperwork

Most teachers in the AGP viewed its paperwork as overwhelming, confusing, and redundant. Each AGP student was required to have the following documents completed: (See Appendix H for complete packet.)

- Checklist for Required Documents for Initial Placement (DEES MO-3)
- Request for Special Services Team Evaluation (#34501)
- Parent Consent for Special Services Team Evaluation (#34502)
- Psychological Evaluation Report
- Gifted Program Behavior Checklist
- Parent Eligibility/IEP Invitation (DEES MO-12)
- Eligibility/Placement Staffing (DEES MO-1)
- Notice and Consent for Placement (DEES MO-10)
- Individual Educational Plan (IEP) (DEES MO-15)
- Individual Educational Plan (IEP) (DEES MO-15a) (Goals and Objectives)
- Individual Educational Plan (IEP) (DEES MO-15b) (Annual Review)

For most of these forms, multiple copies were made and distributed to specific audiences. NCR paper was used for this purpose. According to Ms. Jean Stovall, Staffing Supervisor for DEES, all named documents are required for compliance with the state's accountability regulations.

In addition to these documents, the data processing clerk at each school was responsible for completing a "Special Programs Data Form" (MO-21) for each AGP student; a DEES file conference sheet and a DEES Documents recording sheet also were required. In all, 14 original documents and 30 copies were completed for each AGP student (a total of 44 separate pieces of paper).

Teachers and guidance counselors remarked that they spent considerable hours filling in the same identifying information (name, school, DEES

and/or DOSS number, date of birth, grade) on each documentation page. When multiplied by the number of students at each school, the sum of document pages, copies, and individual names, dates, grades, etc. quickly became staggering.

At the elementary level, AGP teachers were primarily responsible for paperwork once students were staffed into the gifted program. Prior to actual program entry, classroom teachers, curriculum specialists and/or guidance counselors completed referral and eligibility documents. Initially DEES staffing specialists facilitated the paper flow and assisted in obtaining parent permission and inviting parents to IEP meetings. Later in the year, however, staffing specialists (at the request of the elementary principals' group) were not involved in AGP documentation procedures. About half of the AGP elementary teachers commented negatively on the paperwork requirements.

In most schools at the secondary level, guidance counselors and staffing specialists were primarily responsible for paperwork connected with the program. Individual secondary school policies differed in the extent of actual teacher involvement. A few AGP teachers, mostly at the senior high level, reported they were not responsible for any AGP paperwork. A majority of AGP teachers, mostly at the junior high level, stated they were responsible for some pieces of paperwork such as the IEPs for mathematics and science and the annual reviews. Many of these teachers said they spent significant amounts of time at the beginning of the year completing AGP forms. About 20 percent of the AGP teachers commented negatively on the paperwork requirements.

For the most part, paperwork was viewed as nonfunctional for classroom teachers. Some teachers stated that IEP goals and objectives documents for the science program were somewhat useful for communicating with parents about the AGP curriculum. The mathematics IEP goals and objectives document was recommended for extensive revision. At present, the same document is used at both elementary and secondary programs; teachers and parents reported it is too general and makes no specific statements about the AGP mathematics curriculum.

Because of the magnitude of beginning and end-of-the-year paperwork requirements, and because of the duplication of information on many program documents, teachers were understandably dissatisfied with this aspect of the AGP.

Grading/Course Credit/Student Performance

In several instances, student performance and teacher expectations clashed resulting in mild confusion and some frustration over grading policies for the AGP. Early in the school year it became evident that definition and clarification were needed regarding grading criteria, reporting procedures, and course classification. Some students who had consistently chalked up 1's and A's in regular program courses found themselves earning 2's, 3's and C's, D's in gifted coursework. Teachers hesitated to assign low marks to students, reasoning that if they had been enrolled in regular courses, their grades would have been better. Also, since this was the first year of increased student expectations and coursework acceleration, teachers were unsure of the legitimacy of these expectations.

Elementary program supervisors intervened by developing an AGP insert for the present report card (see Appendix I). Elementary AGP teachers and administrators agreed that this insert was preferable to the traditional reporting system, but that a more accurate reporting mechanism is still needed.

The secondary general director and supervisors clarified course classifications (which affect extra grade points for high school standing) and instructed teachers to grade students according to the AGP accelerated course objectives. Across the district secondary teachers reported that, on the average, about 20 percent of students in their AGP classes were having significant difficulty with course content. (Although the average was 20 percent, the reported range of inappropriate candidates was 0-100 percent.) Some of these students withdrew from the AGP class; others stayed, received low grades and/or struggled through the course. Mathematics courses and the science research course were most frequently affected. Students who withdrew did so after the first few weeks or during the semester break. They were rescheduled into regular program courses. At the senior high level, about 16 percent of students withdrew from AGP courses. At the junior high level, about 7 percent of students withdrew from AGP courses.

According to AGP teachers, students experienced the most difficulty in these areas:

- study habits and skills,
- independent work situations (motivation to complete assignments and application of their abilities to a task),
- organization of and research for the science research project,

- management of time/planning for long range projects,
- adjustment to academic demands (not receiving an "easy A"), and
- pace of content delivery.

As shown in Table 8, most students who were interviewed thought that AGP expectations were just about right; all respondents thought they were capable of doing the AGP coursework; almost all respondents chose to continue in the AGP. Many interviewees (a majority at the senior high level) thought their other coursework was affected by the AGP. Most did not feel their grades were affected by their membership in the AGP.

Table 8

AGP Student Interview Responses

.How much do you think is expected of you in the AGP?

	Elementary	Junior High	Senior High
Too much	14%	22%	11%
About right	84%	63%	78%
Too little	2%	15%	11%

.Do you think you're capable of doing the work in the AGP?

Yes	100%	100%	100%
No	----	----	----

.Would you choose to continue in the AGP?

Yes	100%	90%	86%
No	----	10%	14%

.Does your work in your AGP classes affect your other work?

Yes	42%	34%	56%
No	58%	66%	44%

.Are your grades affected by being in the AGP?

Yes	9%	28%	17%
No	91%	72%	83%

General Attitudes

This section will report general attitudes toward the Academically Gifted Program of parents of eligible AGP students, regular program teachers, AGP teachers, and school administrators. Mail-out surveys and telephone or personal interviews were conducted with a random sample of each of these groups.

Parents. Telephone interviews, conducted in April 1983 with a random sample of 78 parents, revealed that parents were generally satisfied with the AGP. As shown in Table 9, 87 percent of interviewed parents thought their children were learning more this year as compared to last year; only one parent stated their child was learning less this year than last year. Seventy-eight percent of respondents thought the AGP was meeting their child's academic needs. When asked whether they would encourage their child to participate in the AGP next year, 92 percent answered in the affirmative. Those who answered negatively stated their child had failed or done poorly in the AGP course, or the child no longer had time for social activities.

Some AGP parents offered some suggestions for AGP improvement including:

- more communication from teachers and schools,
- more teacher direction in coursework rather than mostly independent work,
- reduction in the amount of homework in some classes,
- revision and clarification in grading policies,
- school-based or county-level seminars for parents, and
- increased course offerings in additional areas.

In at least two elementary schools personnel conducted school-based AGP parent surveys (see Appendix J). In these two locations, parents were overwhelmingly satisfied with implementation of the AGP.

Several AGP parents at one elementary school voiced dissatisfaction with its mathematics program. Throughout the year, school-level and county-level administrators worked with this parent group and the AGP teacher to resolve parents' concerns. At this time, some dissatisfaction with the mathematics curriculum and its delivery still exists. Administrators will continue to monitor this program during 1984-85.

Table 9
Results of AGP Parent Telephone Interviews

.As a result of participation in the AGP, do you think your child is:

	Elementary	Junior High	Senior High	Total
learning more this year?	95%	83%	75%	87%
learning less this year?	0%	0%	6%	1%
learning about the same as other years?	5%	17%	19%	12%

.Do you think the AGP is meeting your child's needs?

Yes	89%	67%	69%	78%
No	11%	25%	19%	17%
Don't Know	0%	8%	12%	5%

.Will you encourage your child to participate in the AGP next year?

Yes	100%	87%	81%	92%
No	----	13%	13%	7%
Don't Know	----	----	6%	1%

Regular Program Teachers. In April 1984, a Likert-type survey (see Appendix K) was sent to 400 randomly selected teachers at schools in which an AGP was housed. Teachers were asked their opinions about various aspects of the AGP including: general knowledge of the program, selection of students for the program, the program's effect on other classes, implementation of the program at their school, and their overall opinion of the program.

Figure 4 graphically displays average responses of the 198 teachers who completed and returned the survey. The shaded area on the figure represents varying degrees of positive attitude; the center line represents a neutral attitude; white space stands for a negative attitude. As shown, responses in all five areas fell into the lower section of the shaded area, which stands for a "slightly positive" attitude. In all instances, mean scores for each program aspect fell between the neutral and positive points on the scale.

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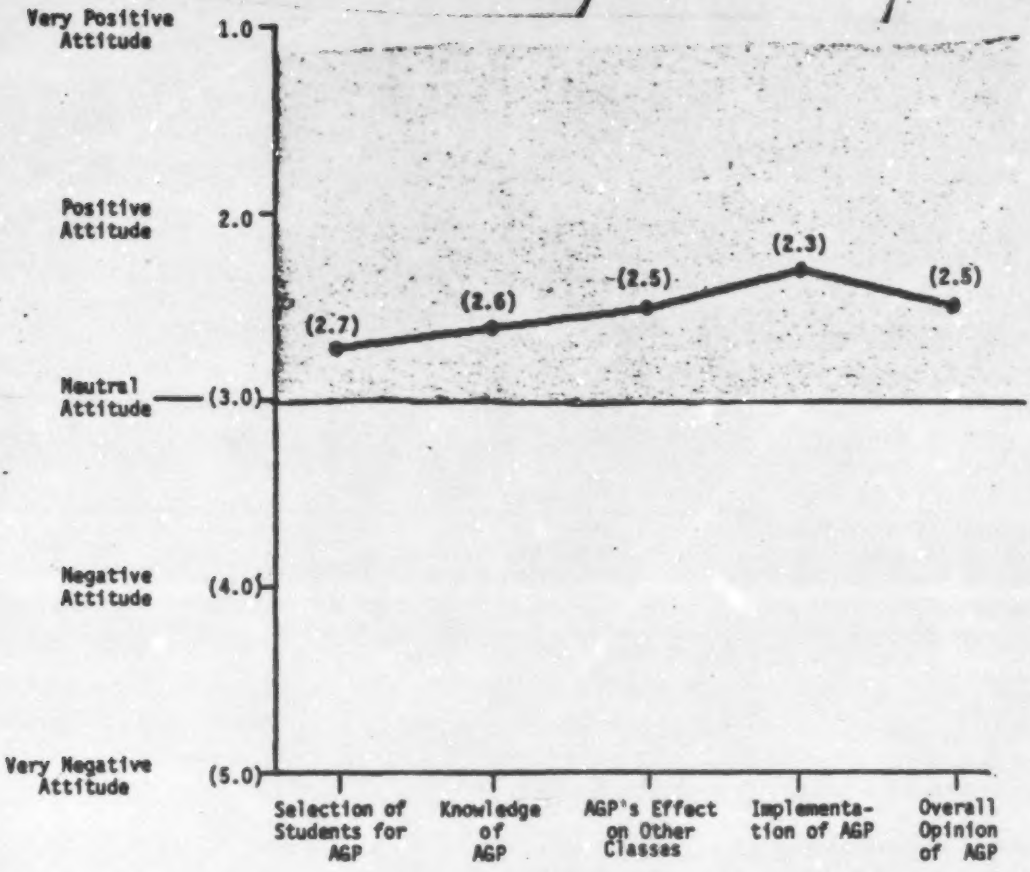
he AGP


Very Positive Attitude
1.0
Positive Attitude
2.0
(2.7)
(2.6)
(2.5)
(2.3)
(2.5)
Neutral Attitude
(3.0)
Negative Attitude
(4.0)
Very Negative Attitude
(5.0)
Selection of Students for AGP
Knowledge of AGP
AGP's Effect on Other Classes
Implementation of AGP
Overall Opinion of AGP

AGP teachers. Attitudes of AGP teachers varied by school level. Elementary AGP teachers were extremely supportive and satisfied with the program. Ninety-six percent stated they were pleased with their 1983-84 teaching assignment; the same percent said they would continue in the program. A significant number of teachers expressed a great deal of pleasure with their AGP involvement with comments such as: "I think I've died and gone to heaven," "My kids are a joy to work with," and "This is the most work I've ever done and the most fun I've ever had teaching."

Junior high AGP teachers' reviews were mixed. Although 86 percent stated they were satisfied with their 1983-84 teaching assignment, less than 70 percent said they chose to continue teaching in the AGP. Some of these teachers said they'd give it one more year "to see if the bugs can be worked out." Much dissatisfaction stemmed from a heavy workload (six periods a day), certification requirements (six hours of credit to be earned each year), lack of definitive program guidelines, and lack of adequate teacher preparation/training. Several junior high AGP teachers expressed praise for the program and for administrators at their schools who'd "made it work this first year."

Senior high AGP teachers also had mixed attitudes toward the program. Although 92 percent of them were satisfied with their 1983-84 teaching assignment and the same percentage reportedly chose to remain teaching in the AGP, some of them criticized district administrators for the lack of specific program guidelines and lack of support (materials and communication) throughout the year. They also questioned the need for additional graduate coursework in gifted education.

School administrators. Attitudes of principals and assistant principals ranged from very positive to slightly negative. Elementary principals with sufficient numbers of students to warrant a school-based program were generally very positive toward the AGP. Elementary principals whose students attended the learning center were generally neutral about the AGP. Despite their support of more rigorous academic content for gifted students, they thought programs should be school-based to allow for daily AGP instruction.

Secondary principals were divided in their attitudes toward the AGP. As discussed previously, many initial impressions were negative because of the short time frame within which the program was implemented in the schools. On short notice, principals were required to find teachers to take on extra teaching periods and new course preparations, and have guidance personnel hurriedly identify sufficient numbers of students for the AGP and reschedule those students into AGP courses. In addition, some senior high principals felt they already offered a wide range of courses appropriate for students' needs. Several secondary principals were very enthusiastic about the program, considered it a priority, and encouraged staff members in its implementation.

Media. At least five newspaper articles and/or letters to the editor appeared in the Tampa Tribune throughout the year, and are shown in Appendix L.

PRODUCT VARIABLES

Product variables refer to measures of program effectiveness and impact. They may include achievement test scores, aptitude test scores, attitude measure scores, attendance data, and other performance indicators. Because this was the first year of program implementation, product data were not collected. However, some preliminary activities did occur in preparation for future evaluation events.

Myrna Robinson, principal, chaired the elementary product evaluation committee which investigated the potential "ceiling effect" of grade level testing with the Comprehensive Test of Basic Skills (CTBS). Several persons around the district felt the CTBS grade level test does not allow gifted students to score as high as they are capable of scoring on an achievement test because now the students are working on the next higher grade level's course work. Consequently, they argued the CTBS is not a fair assessment of these students' abilities.

After reading about this "ceiling effect" phenomenon (see Appendix M), the committee met with Dr. John Hilderbrand, Director of Testing and Evaluation, and Mr. Joel Mixon, Testing Statistician, to develop a procedure to investigate the accuracy of these claims. At two elementary schools in the district, gifted students were administered the grade-appropriate level of the CTBS one subtest (either reading, language, or mathematics) of the next higher test level. The purpose of this procedure was to allow comparison of students' obtained achievement scores (in percentile rank, standard score, and grade equivalent score) on the two test versions.

Due to technical problems encountered in scoring the CTBS this year, these comparative data are not available at this time. Results will be reported as soon as they become available.

Elementary AGP science teachers were required to administer the science subtest of the CTBS to their students. Once again, data are unavailable at this time; results will be reported as soon as possible.

During the summer 1984, investigations are underway to identify appropriate product measures for the 1984-85 school year. Several AGP teachers and supervisors are conducting the studies and making decisions about the most appropriate instruments for measuring gains in higher level thinking skills and achievement. At present, few, if any, reliable and valid instruments are available for these purposes.

5.0 CONCLUSIONS AND RECOMMENDATIONS

This section includes conclusions about the 1983-84 AGP and recommendations for its continuation in the future. Conclusions are presented first and are based on data reported in the previous sections of this document. Recommendations, presented last, resulted from synthesis of all evaluative data within the context of the program's purpose and setting, and consultations with program-involved local personnel. If action has already occurred related to particular conclusions and recommendations, it is so noted.

Conclusions

Overall Program. During the first implementation year of the AGP in Hillsborough County, approximately 160 teachers instructed approximately 3,200 elementary and secondary students in the areas of mathematics, science, and/or computers. As expected during the first year of most large-scale innovations, the AGP experienced both successes and failures. Hurried district-wide implementation caused problems in curriculum design and administration of the program, both of which must be remedied if the program is to enjoy success in the future.

The elementary level, which is operating relatively smoothly at this point, experienced problems in funding allocations, available facilities and equipment, variety and quality of materials, and equality of instructional delivery time. The secondary program was plagued by last-minute scheduling changes, and lack of adequate laboratory facilities and curriculum

materials. After a "rough start" the AGP is on solid ground in elementary mathematics and science but in need of several modifications. The secondary program needs considerable study and intervention before a quality program can emerge.

Planning. Originally the AGP was designed as a pilot program to be tested in selected locations for one year. Plans were made on this premise in that general guidelines were in place; detailed descriptions, scheduling arrangements, all curriculum guides and materials were not. Thus, some critical program components were missing or incomplete. Greatest impact was felt at the secondary level where teacher selection, student identification and scheduling, and curriculum materials were problem areas.

Program Philosophy and Design. As designed, the AGP was seen as both challenging and stimulating to students. The combined acceleration and exploration/expansion/extension emphasis was viewed positively by teachers, parents, students, and administrators. This year, however, implementation of this design was problematic. Neither students nor teachers were fully prepared for the extension aspects of the program; hence in most areas the focus was on acceleration of content. Some program participants questioned the "narrow" focus of mathematics and science and suggested increasing the program's scope to include additional subject areas.

Personnel. Sufficient numbers of certified teachers of the gifted were not available to teach in the AGP. (Teachers hired in 1983-84 were required to sign statements of intent to earn at least six hours of college credit toward certification). AGP curriculum was delivered by partially trained teachers, that is, subject area training and experience were present, but specific

teaching concepts and techniques for gifted students were absent. Pre-program training received mixed reviews: elementary teachers were generally satisfied; secondary teachers were not. Sufficient coursework offerings and schedules were available through the University of South Florida, Nova University and the district staff development department. Almost all elementary and senior high teachers and about 70 percent of junior high teachers will continue teaching in the AGP. At the secondary level, teacher morale was generally low.

Facilities and Equipment. Adequacy of program facilities and equipment depended on school location; lack of adequate secondary laboratory facilities was a major problem. Studies of both issues were conducted by elementary and secondary committees during 1983-84. Elementary facilities were generally adequate but site-specific problems were evident. Secondary laboratory facilities in schools which include grades 9-12 are set for renovation; however, schools without ninth grade classes will receive no improvements. Supplementary allocations have been suggested for upgrading existing science equipment at elementary schools. Lack of adequate reference materials/books in media centers was evident.

Materials and Supplies. With the exception of several missing or poor quality items, elementary science materials were generally satisfactory and available. Elementary mathematics textbooks were available, but expansion/exploration materials were late in arriving, of poor quality, and generally unusable. Except for available textbooks, secondary materials were nonexistent.

Funding. The AGP generated $3.8 million for the district. Monies were used to maintain lower teacher-pupil ratio and, at the elementary level, to purchase computers and science materials. Elementary teachers had no classroom budgets; secondary teachers had standard course allocations. Both groups agreed these funds were insufficient. Elementary and secondary committees studied the issue during 1983-84 and recommended additional allocations for classroom supplies, materials, and equipment.

Governance. Leadership and direction for the AGP were the joint responsibility of General Directors Worden, Horton, and Betz. This organizational arrangement created some problems in communication about the AGP with teachers and administrators. Most program participants requested identification of a central program leader.

Administrative Support. In general, district-level and school-based administrators were supportive of and responsive to the AGP. Elementary principals with school-based programs were very positive and supportive. Elementary principals with learning center programs were less positive because they were concerned about inequities in instructional time allocations. Due to hurried implementation and its accompanying difficulties, secondary principals were neutral to positive about the program. District-level administrators, particularly elementary supervisors, received positive reviews from teachers and school administrators. In some instances, secondary teachers were critical of non-support and/or communication from the district level.

Student Identification and Selection. A major issue during this first year, almost every person involved in the program stated that IQ measures alone

were insufficient means to identify students for the program. Most persons favored a combination of IQ, achievement, and interest measures to determine program eligibility. Several studies were initiated by the Office of Psychological Services to investigate this issue and others, such as minority membership in the AGP and screening procedures for junior and senior high school students.

Curriculum Implementation. As expected, most of this year's curriculum focus was on acceleration of content. Students and teachers had to cover 1½ to 2 years of content in one year. Some students who were unaccustomed to rapid presentation and pace of subject matter and who lacked necessary prerequisite content area skills and study habits were unable to cope with the program's expectations. Most of the 20 percent of students who withdrew from the program did so for these reasons. Modification of pace was particularly critical in sixth and seventh grade mathematics courses. Many teachers, parents, and administrators voiced concerns that the AGP emphasized quantity of subject matter rather than quality of thinking skills in 1983-84. They expressed hope that the appropriate curriculum design would be emphasized and implemented in the future.

Materials Usage. For two reasons: the accelerated nature of the AGP curriculum and the lack of extension/expansion/exploration materials, textbooks were the major program materials during 1983-84. The elementary science program seemed to be the only one in which adequate materials were available. Materials in elementary mathematics, secondary mathematics, and secondary science ranged from poor to adequate. Curriculum guides,

supplementary materials, additional laboratory supplies, and computer software are definite areas of need.

Instructional and Planning Time. By design, elementary (4-6) and secondary students were to receive two hours per day or about ten hours per week of AGP instruction. (Third grade students were to receive five hours of instruction in the AGP.) This time allotment occurred in 52 elementary schools and every secondary school which participated. Students in 35 elementary schools, however, attended the learning center program and received only five hours per week of AGP instruction. Over a three-year period, these students will receive 360 fewer AGP instructional hours than other students.

Planning time was a pervasive problem, particularly for secondary level teachers -- most of whom had no planning period. Almost every AGP teacher mentioned this issue as a major concern citing new course preparation, laboratory set-ups, student and parent conferences, and additional paperwork as time-consuming activities.

Communication. The AGP's "infant" status, its lack of a central program leader, and its hasty implementation caused some communication difficulties. Some decisions, by necessity, were made as situations arose. Conflicting messages were sometimes transmitted because of the number of persons "in charge of" its implementation. Communication lines and needs were not planned or anticipated in advance. Program directors did meet with groups of principals and teachers to determine program needs. Elementary supervisors offered regular meetings to elementary teachers. Secondary teachers, however, had no opportunity to meet on a regular basis, and generally

felt uninformed about the program. A majority of AGP parents felt they had been provided sufficient information about the AGP.

Class Size. The reduced teacher-pupil ratio in the AGP was viewed as one of the most positive aspects of the program. About 80 percent of all AGP classes contained fewer than 20 students; 10 percent contained more than 25 students. Teachers, parents, and students commented favorably on the small class size. Some "overcrowded" classes drew complaints.

Recordkeeping/Paperwork. The magnitude of DEES paperwork requirements and the redundant information on many of its forms caused considerable dissatisfaction with this program component. Although some documents were useful in communicating with parents, required documents were generally viewed as nonfunctional.

Grading/Course Credit/Student Performance. AGP students thought its expectations were about right and that they were capable of doing its coursework. Teachers generally agreed, but said students were weak in study habits and were experiencing difficulties in adjusting to academic demands. Grading policies were questioned throughout the year and still need discussion and clarification.

General Attitudes. Parents of eligible AGP students were generally positive about the program. Regular program teachers were generally neutral. Most AGP teachers expressed positive attitudes about the program; those who expressed negative attitudes most often cited its hurried implementation, their extra-heavy workload this year, and gifted certification requirements as program drawbacks.

Recommendations

1. The AGP should be continued as a school-based academically-oriented program for students in grades 3-12.

2. In order to expand its scope and encourage dynamic growth, continuous planning activities should occur throughout the life of the program. AGP teachers, students, and parents as well as district and school-based administrators, and members of the business, academic, and cultural communities should be included in selected stages of the program planning. Long-range goals and activities should be delineated and described in detail well in advance of their implementation. Planning activities in progress should be communicated to all involved program personnel so their contributions may be considered. Ongoing conversations with students, teachers, parents and persons in the community should be used to provide direction and substance to the program.

3. The acceleration element of the program should be continued. However, it should be accompanied and tempered by the extension/exploration/expansion aspects of the program. In addition to clarifying this component, teachers should be furnished with and trained to use material and ideas that emphasize higher-level thinking skills. This recommendation is particularly critical in the mathematics curriculum.

4. Elementary and secondary teachers who continue to teach in the AGP will need additional subject-area training, particularly in mathematics theory, computer programming and science content. As students come up through the program, their knowledge base will become increasingly sophisticated and profound. Teachers will need to update their skills on a regular basis which will require a sequential, long-range, well-planned ongoing staff development training schedule. Sufficient numbers of options should be available so that teachers may select evening and/or summer sessions. Stipends should be paid for non-credit inservice offerings in subject area content. The teacher training plan

should be based on anticipated student needs, performance levels, and outcomes.

5. Incentives should be available for teachers who teach AGP classes. Regular meeting times should be set aside so information exchange and sharing can take place. DEES paperwork requirements should be removed as a teacher responsibility. Additional planning/conferencing periods should be set aside for AGP teachers. At the secondary level, teachers who teach AGP courses should teach one less course than other teachers in order to have one additional planning period.

6. Elementary site-specific facilities problems should be corrected as outlined in the report produced by the elementary "Budget and Facilities" committee. The secondary laboratory facilities improvement schedule should be communicated to all involved program personnel. In 1984-85 a study should be made of all seventh grade centers and Eisenhower Junior High to investigate and describe the condition of their laboratory facilities. If necessary, supplementary funds should be used to upgrade them to acceptable standards for AGP lab experiences.

7. Both elementary and secondary schools should be allotted additional monies to purchase science equipment and reference materials. Subject area supervisors and AGP teachers, in conjunction with media personnel, should compile lists of necessary pieces of equipment and preferred reference books. These lists should be communicated to local PTAs and community and business groups. Individual school personnel should make long-range planning schedules for equipment acquisition.

8. Elementary AGP science teachers and supervisors should identify specific missing and faulty SBC kit materials in order to improve the quality of program materials. Elementary AGP mathematics teachers and supervisors should identify and/or develop extension/exploration/expansion materials that will focus on and emphasize this aspect of the curriculum. The nature of the materials should make clear the equivalent status of the higher-level thinking skills

component. Training in their use and purpose should accompany delivery of the materials; a first-year evaluation should be conducted.

9. Secondary AGP science and mathematics teachers and supervisors should develop curriculum guides to specify course objectives, clarify pacing of instruction, and integrate acceleration and expansion/exploration/extension components. In addition, materials that focus on and emphasize higher-level thinking skills should be identified, developed and/or purchased. Clarification of the differences between AGP, advanced, and AP courses is essential. This differentiation should be clearly delineated and communicated to AGP teachers. The role of the computer in secondary mathematics courses and AGP objectives for the computer should be clarified and communicated. Training for teachers may be necessary.

10. Sufficient varieties of quality computer software should be identified and purchased. A multi-year plan for its purchase may be necessary.

11. The pre-algebra book used in the sixth grade AGP course should be reevaluated by AGP teachers and mathematics supervisors.

12. As specified in the elementary "Budget and Facilities" report, teachers should be provided with a sufficient ($200) classroom budget for teaching supplies and additional monies for consumables for each child.

    Secondary AGP teachers should receive comparable amounts of teaching supply and consumable monies. Special allocations should be made for science laboratory supplies, especially in grades 9-12 where the curriculum design specifies 50 percent lab time.

13. Program supervision should be accomplished by a person or persons whose sole responsibilities are the AGP and its operation. This person should oversee and coordinate all program components and occurrences, provide direction for the developing nature of the AGP, work cooperatively with personnel in the Departments of Student Services, Exceptional Student Education, Elementary and Secondary Education, Testing and Evaluation, and school-based teachers and administrators, respond in timely fashion to program needs, and act as

a liaison with local, state, and federal agencies and interested members of the community. This position could fit into the organizational structure in one of several ways, including: 1) overseeing the entire program, working with all other departments within the instructional division, and reporting directly to the Assistant Superintendent for Instruction; 2) appointing two persons, one to coordinate the elementary program and one to coordinate the secondary program.

14. Support from all administrative levels should continue to be available to school-based administrators and teachers. As stated previously, supervisor(s) and/or program head(s) should convene regular meetings with AGP teachers for the purpose(s) of information exchange, sharing, support, and needs assessment. At their regular meetings principals should be informed/updated about program progress.

15. To eliminate elementary level inequities in instructional time among AGP students, the district should move toward a totally school-based Academically Gifted Program. The "Equalization" report (Appendix E) should be used as a starting place in determining available options. Efforts should be made to maintain the exclusivity of AGP classes, thus assuring continued state funding for the program. Detailed cost analysis reports should be generated to determine the actual district cost of each option.

16. When the school-based operation is realized, the existing learning center facility in Tampa should be used for supplementary offerings. In response to parent, student, and teacher requests for more diverse course offerings, the learning center's purpose and facility should be adapted to offer continuous and/or summer supplementary programs in specific areas for which school-based programs are not equipped or prepared, such as: 1) the arts including dance, creative dramatics, theater, photography, poetry, architecture, graphics, 2) selected sciences including archaeology, anthropology, 3) travel, 4) leadership training.

17. Student selection (especially at the secondary level) for the AGP should be based on a combination of IQ (to comply with state

regulations) and aptitude or achievement measures. Studies which address the under-representation of minorities in the AGP and the identification of the most appropriate screening instruments for elementary and junior high school students should continue.

18. The reduced teacher-pupil ratio in AGP classes should be maintained. (Preferred size is 1:15 or fewer.) To eliminate complaints from teachers, students, and parents, AGP class size should be closely monitored throughout the school year, particularly at the junior and senior high schools.

19. DEES paperwork requirements for the program should not be a teacher responsibility, but a joint effort of DEES staffing specialists, guidance departments, and clerical staff. At the secondary level in particular teachers who have other responsibilities in addition to the AGP should not be required to complete DEES paperwork. At the elementary level, DEES paperwork should be a guidance, clerical, and staffing specialist responsibility or AGP teachers should be given release time to meet with parents and to complete paperwork requirements. It is unreasonable to expect AGP teachers in larger schools to meet with more than 50 parents in a short period of time and to plan for and teach AGP classes.

    Because of the general nature of the IEP, group IEP parent meetings should continue, with the clear provision for opportunities for individual conference sessions.

20. A committee composed of DEES staffing specialists, guidance and records personnel, the Management Information Systems supervisor, data processing personnel and state department DEES representatives should be assembled to review existing AGP documentation procedures and to make recommendations for reducing the number of documents and redundancies on the documents. A management information consultant should be hired to make specific recommendations for streamlining documentation procedures. In the interim, a request should be made to data processing to print multiple labels for each AGP student

to include name, school, grade, student number, birthdate, parent name, address, etc.

21. AGP grading policies should be reevaluated by a team of supervisors, AGP teachers, AGP students and AGP parents. Resulting recommendations and policies should be publicized to all involved AGP participants.

    A study should be initiated to investigate the types of grades AGP students are making in AGP and other courses. Secondary students who take multiple advanced courses should be specifically targeted for review.

22. Specific information about the AGP should be disseminated to regular program teachers and members of the community. Brochures could be used for this purpose.

    In addition, information about the Hillsborough County Academically Gifted Program should be disseminated at national professional and business conferences. Reciprocal information exchanges should be encouraged.

23. Continued evaluation of the AGP is recommended particularly of the secondary program which will add AGP courses in social studies and English during 1984-85. The evaluation focus should remain formative in nature, but also place emphasis on the identification and/or development of product indicators.

6.0 FUTURE EVALUATION PLANS

The next cycle of this evaluation will continue to emphasize the provision of formative feedback to Academically Gifted Program decision-makers, and will include a product (i.e., program effect) dimension. Descriptive information on new program components and modifications to existing components will be solicited from school-based and district personnel, as well as AGP students and their parents. Numerical data specifying involved schools, students, and teachers will also be collected. In addition, plans are being made to gather student achievement data in selected subject areas.

During summer 1984, evaluators will work with program directors to identify evaluation questions for 1984-85, determine the most effective/efficient means of data collection, and set timelines for verbal and/or written feedback sessions. Once again, in June 1985 an annual report will be generated and disseminated.

All suggestions for future investigations are welcomed and, within the resource constraints of the Department of Testing and Evaluation and state-of-the-art evaluation/measurement techniques, will be considered.